

Listing of Claims

1. (Previously Presented) A call connection method, comprising:
receiving a request for a call connection;
comparing loads supported by a plurality of packet processors; and
assigning the call connection to a first packet processor having a first load that is no larger than a second load supported by any other of the plurality of packet processors, wherein said comparing includes:
 - (a) determining an accumulated packet holding time of each of the plurality of packet processors;
 - (b) determining the load supported by each of the plurality of packet processors based on the corresponding accumulated packet holding time; and
 - (c) comparing the loads of the respective packet processors, wherein each of the plurality of packet processors reports the respective accumulated packet holding time periodically based on a period set by a user.
2. (Canceled)
3. (Previously Presented) The method of claim 1, wherein each of the plurality of packet processors measures a packet holding time at a regular interval and reports the corresponding accumulated packet holding time to a call assignment processor.

4. (Original) The method of claim 3, wherein the packet holding time is a time difference between a time the respective packet processor becomes busy, due to a transmission of packet data, and a time the respective packet processor becomes idle.

5. (Canceled)

6. (Original) The method of claim 1, wherein the load supported by each of the plurality of processors is determined by dividing a corresponding accumulated packet holding time by a report period.

7. (Original) The method of claim 1, wherein the call connection is a data services call.

8. (Original) The method of claim 1, wherein the call connection is assigned in a predetermined order when multiple packet processors of the plurality of packet processors have equivalent loads that are no larger than the load of any other of the plurality of packet processors.

9. (Previously Presented) A method for assigning packet resources, comprising:
receiving a request for a call connection from a terminal;
determining an accumulated packet holding time for each of a plurality of packet processors;

comparing loads supported by each of the plurality of packet processors on the basis of their corresponding accumulated packet holding times; and

assigning the packet resources to support the requested call connection from a first packet processor having a first load that is no larger than a second load supported by any other of the plurality of packet processors, wherein each of the plurality of packet processors reports the respective accumulated packet holding time periodically based on a period set by a user.

10. (Original) The method of claim 9, wherein each of the plurality of packet processors measures a packet holding time at a regular interval and reports the corresponding accumulated packet holding time to a call assignment processor.

11. (Original) The method of claim 10, wherein the packet holding time is a time difference between a time the respective packet processor becomes busy, due to a transmission of packet data, and a time the respective packet processor becomes idle.

12. (Original) The method of claim 9, wherein the load supported by each of the plurality of packet processors is determined by dividing the corresponding accumulated packet holding time by a report period.

13. (Canceled)
14. (Original) The method of claim 9, wherein the call connection is a data services call.
15. (Original) The method of claim 9, wherein the call connection is assigned in a predetermined order when multiple packet processors have equivalent loads that are no larger than the load of any other of the plurality of packet processors.
16. (Currently Amended) A packet processing device, comprising:
a plurality of packet processing circuits each processing packet data of calls carried by a wireless local loop system; and
a call assignment circuit which assigns resources of the packet processing circuits to support the calls, wherein
the call assignment circuit assigns a resource from a particular packet processing circuit based on a relative resource utilization of the plurality of packet processing circuits, the call assignment circuit assigning the resource by:
receiving an accumulated packet holding time ~~resource utilization information~~ from each of the packet processing circuits;
determining the resource utilization of each of the packet processing circuits based on a corresponding one of the accumulated packet holding times; and

comparing the resource utilization of the packet processing circuits ~~resource utilization information~~, wherein each of the plurality of packet processing circuits reports a corresponding one of the accumulated packet holding times ~~resource utilization information~~ periodically based on a period set by a user.

17. (Previously Presented) The device of claim 16, wherein the call assignment circuit assigns the resource from the particular packet processing circuit having a corresponding resource utilization no greater than that of any other of the plurality of packet processing circuits.

18. (Previously Presented) The device of claim 16, wherein the resource utilization is a processing load supported by each of the plurality of packet processing circuits.

19. (Previously Presented) The device of claim 16, wherein:

the resource utilization of each of the plurality of packet processing circuits is a processing duty cycle determined by a ratio of a busy time of the respective packet processing circuits to a duty period; and

the busy time is a cumulative time each of the respective packet processing circuits devotes to processing the packet data during the duty period.

20. (Currently Amended) A communication system, comprising:
multiple terminals that each communicate packet data in a call;
a plurality of packet processing circuits which process the packet data; and
a call assignment circuit which assigns a resource of a particular packet processing circuit to support the call, wherein:

each of the plurality of packet processing circuits reports an accumulated packet holding time ~~resource utilization information~~ to the call assignment circuit periodically based on a period set by a user, and

the call assignment circuit assigns the resource from the particular packet processing circuit based on the reported ~~resource utilization information~~ accumulated packet holding times from the packet processing circuits, the resource being assigned to one of the plurality of packet processing circuits having a dynamically changing resource utilization no greater than that of any other of the plurality of packet processing circuits to support the call.

21. (Currently Amended) A communication method, comprising:
determining a processing utilization of resources of each of multiple packet processing functions;
selecting a particular packet processing function based on [[a]] relative processing utilization of resources of the packet processing functions; and

assigning a resource of the particular packet processing function to support a packet data communication, said determining including the resource being assigned by:

receiving an accumulated packet holding time ~~resource utilization information~~ from each of the packet processing functions, the processing utilization of resources of the packet processing functions being determined based on corresponding ones of the accumulated packet holding times; and wherein said selecting includes:

comparing the processing utilization of resources of the packet processing functions ~~resource utilization information~~, wherein each of the plurality of packet processing functions reports a corresponding one of the accumulated packet holding times ~~resource utilization information~~ periodically based on a period set by a user.

22. (Original) The method of claim 21, wherein the particular packet processing function has a corresponding processing utilization of resources no greater than that of any other packet processing functions.

23. (Original) The method of claim 21, wherein the processing utilization of resources is a processing load supported by each of the packet processing functions.

24. (Original) The method of claim 21, wherein:

the processing utilization of resources of each of the packet processing functions is a processing duty cycle determined by the ratio of the respective packet processing function's busy time to a duty period; and

the busy time is a cumulative time the respective packet processing function devotes to processing packet data during the duty period.

25. (Original) The method of claim 21, further comprising:

communicating packet data from a first terminal to a second terminal by wireless communication; and

processing the packet data using the resource of the particular packet processing function assigned to the packet data communication.